

REMARKS

Summary of Office Action

Claims 1-17 are pending.

In the Office Action, claims 1, 2, 4, 5, 12 and 13 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Anderson et al. U.S. Patent No. 6,646,857 ("Anderson"). Claims 3 and 14-16 have been rejected under 35 U.S.C. § 103(a) as being obvious from Anderson in view of Matsunaga Daisuke JP 05-129421. Claims 6-11 are rejected under 35 U.S.C. § 103(a) as being obvious from Anderson in view of Gujer et al U.S. Patent No. 6,572,708 ("Gujer"). Further, claims 1 and 17 have been objected to as being unclear¹.

The Examiner finds patentable subject matter in claims 12-16 and indicates these would be allowed if rewritten in suitable form.

Applicants' Reply

Applicants appreciate Examiner's finding of allowable subject matter in claims 12-16.

Applicants have amended claims 1 and 17 for clarity and to place them in a common U.S. patent practice format as kindly suggested by the Examiner. In the claims "pin guides" have been renamed "pin guide bodies." No new matter is added (see e.g., Specification page 5, lines 11-13 and p. 8 line 35).

Applicants respectfully traverse the rejections of record.

Independent Claim 1

Independent claim 1 has been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Anderson.

¹ The Office Action does not indicate whether claim 17 has been examined, allowed or disallowed over the cited prior art.

Claim 1 is directed to Applicants' inventive wafer lifting device which includes separate pin guide bodies for each pin, in which guide body the pin is held and guided for longitudinal movement. Claim 1 further requires that the separate pin guides be detachably connected to a wafer support member.

In contrast, Anderson is directed to a prior art wafer lifting device (such as described in the Applicants' specification). (See specification, paragraphs 0001, 0005, and 0009). Anderson's device includes a pin lifter yoke with a set of pins connected to it, where the set of pins is configured to move through an electrostatic chuck and contact the bottom surface of the wafer. (See Anderson, Abstract). Anderson's device has the disadvantage that the pins may rub the through holes which leads to the undesirable generation of particles and a scratching of the wafers on the underside. In Anderson's device, the pins move through the electrostatic chuck through a number of penetrations 226 or holes in the chuck. (See Anderson, col. 4 line 64 - col. 5 line 1). However, Anderson fails to disclose separate pin guide bodies that guide each pin, and that the pin guide bodies are detachably connected to the wafer support member, as are required by Applicants' claim 1.

In this context applicant further note that Anderson's elements 232 and 234 that are referred to in the Office Action (see numbered ¶ 2) are bellows 232 and sealant ring 234, respectively. These are not separate pin guide bodies that are detachably mounted on the wafer support member. Further, bellows 232 and sealant ring 234, which are designed for atmospheric isolation (see Anderson col. 5 lines 5-10), do not have the "guide and hold" functions of the detachable separate pin guide bodies required by claim 1.

Thus, Anderson does not anticipate claim 1.

Dependent Claims 2-16

Claims 2-16 are dependent upon claim 1 and are patentable over the cited art for at least the same reasons as independent claim 1 described above.

Claim 17

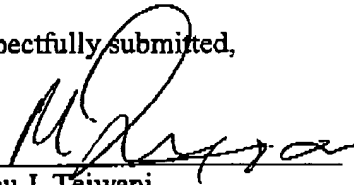
As previously noted, applicants' lifting device according to Claim 17 includes the elements of claim 1, but additionally includes the limitation of claim 2 and a further limitation that the lifting platform is "in direct engagement to the pins." Claim 17 includes all the elements of independent claim 1 and is patentable over the cited art for at least the same reasons as independent claim 1 described above.

Conclusion

In light of the foregoing, Applicants respectfully submit that pending claims 1-17 are in condition for allowance. Prompt reconsideration and allowance of the present application are therefore earnestly solicited.

In the event that the application is not deemed in condition for allowance, the Examiner is invited to contact the undersigned by telephone in an effort to advance the prosecution of this application.

Respectfully submitted,



Manu J. Tejwani
Patent Office Reg. No. 37,952

BAKER BOTTS L.L.P.
30 Rockefeller Plaza
New York, New York 10112-0228
Attorney for Applicants
(212) 408-2500